SEQUENCE LISTING

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<120> FLK-1 IS A RECEPTOR FOR VASCULAR ENDOTHELIAL GROWTH FACTOR

<130> 017853-0145

<140> 10/799,782
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<151> 2001-01-23

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<150> 08/193,829
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Ala Leu Leu Ala Val Ala Leu Trp Phe Cys Val Glu Thr Arg Ala Ala
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tct gtg ggt ttg act ggc gat ttt ctc cat ccc ccc aag ctc agc aca      393
Ser Val Gly Leu Thr Gly Asp Phe Leu His Pro Pro Lys Leu Ser Thr
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cag aaa gac ata ctg aca att ttg gca aat aca acc ctt cag att act      441
Gln Lys Asp Ile Leu Thr Ile Leu Ala Asn Thr Thr Leu Gln Ile Thr
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tgc agg gga cag cgg gac ctg gac tgg ctt tgg ccc aat gct cag cgt      489
Cys Arg Gly Gln Arg Asp Leu Asp Trp Leu Trp Pro Asn Ala Gln Arg
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gat tct gag gaa agg gta ttg gtg act gaa tgc ggc ggt ggt gac agt      537
Asp Ser Glu Glu Arg Val Leu Val Thr Glu Cys Gly Gly Gly Asp Ser
    70                  75                  80

atc ttc tgc aaa aca ctc acc att ccc agg gtg gtt gga aat gat act      585
Ile Phe Cys Lys Thr Leu Thr Ile Pro Arg Val Val Gly Asn Asp Thr
85                  90                  95                  100

gga gcc tac aag tgc tcg tac cgg gac gtc gac ata gcc tcc act gtt      633
Gly Ala Tyr Lys Cys Ser Tyr Arg Asp Val Asp Ile Ala Ser Thr Val
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tat gtc tat gtt cga gat tac aga tca cca ttc atc gcc tct gtc agt      681
Tyr Val Tyr Val Arg Asp Tyr Arg Ser Pro Phe Ile Ala Ser Val Ser
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gac cag cat ggc atc gtg tac atc acc gag aac aag aac aaa act gtg      729
Asp Gln His Gly Ile Val Tyr Ile Thr Glu Asn Lys Asn Lys Thr Val
        135                 140                 145

gtg atc ccc tgc cga ggg tcg att tca aac ctc aat gtg tct ctt tgc      777
Val Ile Pro Cys Arg Gly Ser Ile Ser Asn Leu Asn Val Ser Leu Cys
    150                 155                 160

gct agg tat cca gaa aag aga ttt gtt ccg gat gga aac aga att tcc      825
Ala Arg Tyr Pro Glu Lys Arg Phe Val Pro Asp Gly Asn Arg Ile Ser
165                 170                 175                 180

tgg gac agc gag ata ggc ttt act ctc ccc agt tac atg atc agc tat      873
Trp Asp Ser Glu Ile Gly Phe Thr Leu Pro Ser Tyr Met Ile Ser Tyr
                185                 190                 195

gcc ggc atg gtc ttc tgt gag gca aag atc aat gat gaa acc tat cag      921
Ala Gly Met Val Phe Cys Glu Ala Lys Ile Asn Asp Glu Thr Tyr Gln
            200                 205                 210

tct atc atg tac ata gtt gtg gtt gta gga tat agg att tat gat gtg      969
Ser Ile Met Tyr Ile Val Val Val Val Gly Tyr Arg Ile Tyr Asp Val
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att ctg agc ccc ccg cat gaa att gag cta tct gcc gga gaa aaa ctt      1017
Ile Leu Ser Pro Pro His Glu Ile Glu Leu Ser Ala Gly Glu Lys Leu
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gtc tta aat tgt aca gcg aga aca gag ctc aat gtg ggg ctt gat ttc      1065
Val Leu Asn Cys Thr Ala Arg Thr Glu Leu Asn Val Gly Leu Asp Phe
245                 250                 255                 260

acc tgg cac tct cca cct tca aag tct cat cat aag aag att gta aac      1113
Thr Trp His Ser Pro Pro Ser Lys Ser His His Lys Lys Ile Val Asn
                265                 270                 275

cgg gat gtg aaa ccc ttt cct ggg act gtg gcg aag atg ttt ttg agc      1161
Arg Asp Val Lys Pro Phe Pro Gly Thr Val Ala Lys Met Phe Leu Ser
            280                 285                 290

acc ttg aca ata gaa agt gtg acc aag agt gac caa ggg gaa tac acc      1209
Thr Leu Thr Ile Glu Ser Val Thr Lys Ser Asp Gln Gly Glu Tyr Thr
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tgt gta gcg tcc agt gga cgg atg atc aag aga aat aga aca ttt gtc      1257
Cys Val Ala Ser Ser Gly Arg Met Ile Lys Arg Asn Arg Thr Phe Val
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cga gtt cac aca aag cct ttt att gct ttc ggt agt ggg atg aaa tct      1305
Arg Val His Thr Lys Pro Phe Ile Ala Phe Gly Ser Gly Met Lys Ser
325                 330                 335                 340

ttg gtg gaa gcc aca gtg ggc agt caa gtc cga atc cct gtg aag tat      1353
Leu Val Glu Ala Thr Val Gly Ser Gln Val Arg Ile Pro Val Lys Tyr
                345                 350                 355

ctc agt tac cca gct cct gat atc aaa tgg tac aga aat gga agg ccc      1401
Leu Ser Tyr Pro Ala Pro Asp Ile Lys Trp Tyr Arg Asn Gly Arg Pro
            360                 365                 370

att gag tcc aac tac aca atg att gtt ggc gat gaa ctc acc atc atg      1449
Ile Glu Ser Asn Tyr Thr Met Ile Val Gly Asp Glu Leu Thr Ile Met
        375                 380                 385

gaa gtg act gaa aga gat gca gga aac tac acg gtc atc ctc acc aac      1497
Glu Val Thr Glu Arg Asp Ala Gly Asn Tyr Thr Val Ile Leu Thr Asn
    390                 395                 400

ccc att tca atg gag aaa cag agc cac atg gtc tct ctg gtt gtg aat      1545
Pro Ile Ser Met Glu Lys Gln Ser His Met Val Ser Leu Val Val Asn
405                 410                 415                 420

gtc cca ccc cag atc ggt gag aaa gcc ttg atc tcg cct atg gat tcc      1593
Val Pro Pro Gln Ile Gly Glu Lys Ala Leu Ile Ser Pro Met Asp Ser
                425                 430                 435

tac cag tat ggg acc atg cag aca ttg aca tgc aca gtc tac gcc aac      1641
Tyr Gln Tyr Gly Thr Met Gln Thr Leu Thr Cys Thr Val Tyr Ala Asn
            440                 445                 450
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cct ccc ctg cac cac atc cag tgg tac tgg cag cta gaa gaa gcc tgc      1689
Pro Pro Leu His His Ile Gln Trp Tyr Trp Gln Leu Glu Glu Ala Cys
        455                 460                 465

tcc tac aga ccc ggc caa aca agc ccg tat gct tgt aaa gaa tgg aga      1737
Ser Tyr Arg Pro Gly Gln Thr Ser Pro Tyr Ala Cys Lys Glu Trp Arg
    470                 475                 480

cac gtg gag gat ttc cag ggg gga aac aag atc gaa gtc acc aaa aac      1785
His Val Glu Asp Phe Gln Gly Gly Asn Lys Ile Glu Val Thr Lys Asn
485                 490                 495                 500

caa tat gcc ctg att gaa gga aaa aac aaa act gta agt acg ctg gtc      1833
Gln Tyr Ala Leu Ile Glu Gly Lys Asn Lys Thr Val Ser Thr Leu Val
                505                 510                 515

atc caa gct gcc aac gtg tca gcg ttg tac aaa tgt gaa gcc atc aac      1881
Ile Gln Ala Ala Asn Val Ser Ala Leu Tyr Lys Cys Glu Ala Ile Asn
            520                 525                 530

aaa gcg gga cga gga gag agg gtc atc tcc ttc cat gtg atc agg ggt      1929
Lys Ala Gly Arg Gly Glu Arg Val Ile Ser Phe His Val Ile Arg Gly
        535                 540                 545

cct gaa att act gtg caa cct gct gcc cag cca act gag cag gag agt      1977
Pro Glu Ile Thr Val Gln Pro Ala Ala Gln Pro Thr Glu Gln Glu Ser
    550                 555                 560

gtg tcc ctg ttg tgc act gca gac aga aat acg ttt gag aac ctc acg      2025
Val Ser Leu Leu Cys Thr Ala Asp Arg Asn Thr Phe Glu Asn Leu Thr
565                 570                 575                 580

tgg tac aag ctt ggc tca cag gca aca tcg gtc cac atg ggc gaa tca      2073
Trp Tyr Lys Leu Gly Ser Gln Ala Thr Ser Val His Met Gly Glu Ser
                585                 590                 595

ctc aca cca gtt tgc aag aac ttg gat gct ctt tgg aaa ctg aat ggc      2121
Leu Thr Pro Val Cys Lys Asn Leu Asp Ala Leu Trp Lys Leu Asn Gly
            600                 605                 610

acc atg ttt tct aac agc aca aat gac atc ttg att gtg gca ttt cag      2169
Thr Met Phe Ser Asn Ser Thr Asn Asp Ile Leu Ile Val Ala Phe Gln
        615                 620                 625

aat gcc tct ctg cag gac caa ggc gac tat gtt tgc tct gct caa gat      2217
Asn Ala Ser Leu Gln Asp Gln Gly Asp Tyr Val Cys Ser Ala Gln Asp
    630                 635                 640

aag aag acc aag aaa aga cat tgc ctg gtc aaa cag ctc atc atc cta      2265
Lys Lys Thr Lys Lys Arg His Cys Leu Val Lys Gln Leu Ile Ile Leu
645                 650                 655                 660

gag cgc atg gca ccc atg atc acc gga aat ctg gag aat cag aca aca      2313
Glu Arg Met Ala Pro Met Ile Thr Gly Asn Leu Glu Asn Gln Thr Thr
                665                 670                 675
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acc att ggc gag acc att gaa gtg act tgc cca gca tct gga aat cct      2361
Thr Ile Gly Glu Thr Ile Glu Val Thr Cys Pro Ala Ser Gly Asn Pro
            680                 685                 690

acc cca cac att aca tgg ttc aaa gac aac gag acc ctg gta gaa gat      2409
Thr Pro His Ile Thr Trp Phe Lys Asp Asn Glu Thr Leu Val Glu Asp
        695                 700                 705

tca ggc att gta ctg aga gat ggg aac cgg aac ctg act atc cgc agg      2457
Ser Gly Ile Val Leu Arg Asp Gly Asn Arg Asn Leu Thr Ile Arg Arg
    710                 715                 720

gtg agg aag gag gat gga ggc ctc tac acc tgc cag gcc tgc aat gtc      2505
Val Arg Lys Glu Asp Gly Gly Leu Tyr Thr Cys Gln Ala Cys Asn Val
725                 730                 735                 740

ctt ggc tgt gca aga gcg gag acg ctc ttc ata ata gaa ggt gcc cag      2553
Leu Gly Cys Ala Arg Ala Glu Thr Leu Phe Ile Ile Glu Gly Ala Gln
                745                 750                 755

gaa aag acc aac ttg gaa gtc att atc ctc gtc ggc act gca gtg att      2601
Glu Lys Thr Asn Leu Glu Val Ile Ile Leu Val Gly Thr Ala Val Ile
            760                 765                 770

gcc atg ttc ttc tgg ctc ctt ctt gtc att gtc cta cgg acc gtt aag      2649
Ala Met Phe Phe Trp Leu Leu Leu Val Ile Val Leu Arg Thr Val Lys
        775                 780                 785

cgg gcc aat gaa ggg gaa ctg aag aca ggc tac ttg tct att gtc atg      2697
Arg Ala Asn Glu Gly Glu Leu Lys Thr Gly Tyr Leu Ser Ile Val Met
    790                 795                 800

gat cca gat gaa ttg ccc ttg gat gag cgc tgt gaa cgc ttg cct tat      2745
Asp Pro Asp Glu Leu Pro Leu Asp Glu Arg Cys Glu Arg Leu Pro Tyr
805                 810                 815                 820

gat gcc agc aag tgg gaa ttc ccc agg gac cgg ctg aaa cta gga aaa      2793
Asp Ala Ser Lys Trp Glu Phe Pro Arg Asp Arg Leu Lys Leu Gly Lys
                825                 830                 835

cct ctt ggc cgc ggt gcc ttc ggc caa gtg att gag gca gac gct ttt      2841
Pro Leu Gly Arg Gly Ala Phe Gly Gln Val Ile Glu Ala Asp Ala Phe
            840                 845                 850

gga att gac aag aca gcg act tgc aaa aca gta gcc gtc aag atg ttg      2889
Gly Ile Asp Lys Thr Ala Thr Cys Lys Thr Val Ala Val Lys Met Leu
        855                 860                 865

aaa gaa gga gca aca cac agc gag cat cga gcc ctc atg tct gaa ctc      2937
Lys Glu Gly Ala Thr His Ser Glu His Arg Ala Leu Met Ser Glu Leu
    870                 875                 880

aag atc ctc atc cac att ggt cac cat ctc aat gtg gtg aac ctc cta      2985
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Gly Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val Ile Val Glu Phe
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tgc aag ttt gga aac cta tca act tac tta cgg ggc aag aga aat gaa      3081
Cys Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly Lys Arg Asn Glu
            920                 925                 930

ttt gtt ccc tat aag agc aaa ggg gca cgc ttc cgc cag ggc aag gac      3129
Phe Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg Gln Gly Lys Asp
        935                 940                 945

tac gtt ggg gag ctc tcc gtg gat ctg aaa aga cgc ttg gac agc atc      3177
Tyr Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg Leu Asp Ser Ile
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acc agc agc cag agc tct gcc agc tca ggc ttt gtt gag gag aaa tcg      3225
Thr Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser
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ctc agt gat gta gag gaa gaa gaa gct tct gaa gaa ctg tac aag gac      3273
Leu Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu Leu Tyr Lys Asp
                985                 990                 995

ttc ctg acc ttg  gag cat ctc atc tgt  tac agc ttc caa gtg  gct      3318
Phe Leu Thr Leu  Glu His Leu Ile Cys  Tyr Ser Phe Gln Val  Ala
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aag ggc atg gag  ttc ttg gca tca agg  aag tgt atc cac agg  gac      3363
Lys Gly Met Glu  Phe Leu Ala Ser Arg  Lys Cys Ile His Arg  Asp
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ctg gca gca cga  aac att ctc cta tcg  gag aag aat gtg gtt  aag      3408
Leu Ala Ala Arg  Asn Ile Leu Leu Ser  Glu Lys Asn Val Val  Lys
            1030                1035                1040

atc tgt gac ttc  ggc ttg gcc cgg gac  att tat aaa gac ccg  gat      3453
Ile Cys Asp Phe  Gly Leu Ala Arg Asp  Ile Tyr Lys Asp Pro  Asp
            1045                1050                1055

tat gtc aga aaa  gga gat gcc cga ctc  cct ttg aag tgg atg  gcc      3498
Tyr Val Arg Lys  Gly Asp Ala Arg Leu  Pro Leu Lys Trp Met  Ala
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ccg gaa acc att  ttt gac aga gta tac  aca att cag agc gat  gtg      3543
Pro Glu Thr Ile  Phe Asp Arg Val Tyr  Thr Ile Gln Ser Asp  Val
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tgg tct ttc ggt  gtg ttg ctc tgg gaa  ata ttt tcc tta ggt  gcc      3588
Trp Ser Phe Gly  Val Leu Leu Trp Glu  Ile Phe Ser Leu Gly  Ala
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tcc cca tac cct  ggg gtc aag att gat  gaa gaa ttt tgt agg  aga      3633
Ser Pro Tyr Pro  Gly Val Lys Ile Asp  Glu Glu Phe Cys Arg  Arg
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ttg aaa gaa gga  act aga atg cgg gct  cct gac tac act acc  cca       3678
Leu Lys Glu Gly  Thr Arg Met Arg Ala  Pro Asp Tyr Thr Thr  Pro
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gaa atg tac cag  acc atg ctg gac tgc  tgg cat gag gac ccc  aac       3723
Glu Met Tyr Gln  Thr Met Leu Asp Cys  Trp His Glu Asp Pro  Asn
            1135                 1140                 1145

cag aga ccc tcg  ttt tca gag ttg gtg  gag cat ttg gga aac  ctc       3768
Gln Arg Pro Ser  Phe Ser Glu Leu Val  Glu His Leu Gly Asn  Leu
            1150                 1155                 1160

ctg caa gca aat  gcg cag cag gat ggc  aaa gac tat att gtt  ctt       3813
Leu Gln Ala Asn  Ala Gln Gln Asp Gly  Lys Asp Tyr Ile Val  Leu
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cca atg tca gag  aca ctg agc atg gaa  gag gat tct gga ctc  tcc       3858
Pro Met Ser Glu  Thr Leu Ser Met Glu  Glu Asp Ser Gly Leu  Ser
            1180                 1185                 1190

ctg cct acc tca  cct gtt tcc tgt atg  gag gaa gag gaa gtg  tgc       3903
Leu Pro Thr Ser  Pro Val Ser Cys Met  Glu Glu Glu Glu Val  Cys
            1195                 1200                 1205

gac ccc aaa ttc  cat tat gac aac aca  gca gga atc agt cat  tat       3948
Asp Pro Lys Phe  His Tyr Asp Asn Thr  Ala Gly Ile Ser His  Tyr
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ctc cag aac agt  aag cga aag agc cgg  cca gtg agt gta aaa  aca       3993
Leu Gln Asn Ser  Lys Arg Lys Ser Arg  Pro Val Ser Val Lys  Thr
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ttt gaa gat atc  cca ttg gag gaa cca  gaa gta aaa gtg atc  cca       4038
Phe Glu Asp Ile  Pro Leu Glu Glu Pro  Glu Val Lys Val Ile  Pro
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gat gac agc cag  aca gac agt ggg atg  gtc ctt gca tca gaa  gag       4083
Asp Asp Ser Gln  Thr Asp Ser Gly Met  Val Leu Ala Ser Glu  Glu
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ctg aaa act ctg  gaa gac agg aac aaa  tta tct cca tct ttt  ggt       4128
Leu Lys Thr Leu  Glu Asp Arg Asn Lys  Leu Ser Pro Ser Phe  Gly
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gga atg atg ccc  agt aaa agc agg gag  tct gtg gcc tcg gaa  ggc       4173
Gly Met Met Pro  Ser Lys Ser Arg Glu  Ser Val Ala Ser Glu  Gly
            1285                 1290                 1295

tcc aac cag acc  agt ggc tac cag tct  ggg tat cac tca gat  gac       4218
Ser Asn Gln Thr  Ser Gly Tyr Gln Ser  Gly Tyr His Ser Asp  Asp
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aca gac acc acc  gtg tac tcc agc gac  gag gca gga ctt tta  aag       4263
Thr Asp Thr Thr  Val Tyr Ser Ser Asp  Glu Ala Gly Leu Leu  Lys
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atg gtg gat gct  gca gtt cac gct gac  tca ggg acc aca ctg  cag      4308
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ctc acc tcc tgt  tta aat gga agt ggt  cct gtc ccg gct ccg  ccc      4353
Leu Thr Ser Cys  Leu Asn Gly Ser Gly  Pro Val Pro Ala Pro  Pro
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cca act cct gga  aat cac gag aga ggt  gct gct tagattttca           4396
Pro Thr Pro Gly  Asn His Glu Arg Gly  Ala Ala
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            20                  25                  30

Lys Leu Ser Thr Gln Lys Asp Ile Leu Thr Ile Leu Ala Asn Thr Thr
        35                  40                  45

Leu Gln Ile Thr Cys Arg Gly Gln Arg Asp Leu Asp Trp Leu Trp Pro
    50                  55                  60

Asn Ala Gln Arg Asp Ser Glu Glu Arg Val Leu Val Thr Glu Cys Gly
65                  70                  75                  80

Gly Gly Asp Ser Ile Phe Cys Lys Thr Leu Thr Ile Pro Arg Val Val
                85                  90                  95

Gly Asn Asp Thr Gly Ala Tyr Lys Cys Ser Tyr Arg Asp Val Asp Ile
            100                 105                 110

Ala Ser Thr Val Tyr Val Tyr Val Arg Asp Tyr Arg Ser Pro Phe Ile
        115                 120                 125

Ala Ser Val Ser Asp Gln His Gly Ile Val Tyr Ile Thr Glu Asn Lys
    130                 135                 140

Asn Lys Thr Val Val Ile Pro Cys Arg Gly Ser Ile Ser Asn Leu Asn
145                 150                 155                 160

Val Ser Leu Cys Ala Arg Tyr Pro Glu Lys Arg Phe Val Pro Asp Gly
                165                 170                 175

Asn Arg Ile Ser Trp Asp Ser Glu Ile Gly Phe Thr Leu Pro Ser Tyr
            180                 185                 190

Met Ile Ser Tyr Ala Gly Met Val Phe Cys Glu Ala Lys Ile Asn Asp
        195                 200                 205

Glu Thr Tyr Gln Ser Ile Met Tyr Ile Val Val Val Val Gly Tyr Arg
    210                 215                 220

Ile Tyr Asp Val Ile Leu Ser Pro Pro His Glu Ile Glu Leu Ser Ala
225                 230                 235                 240
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Gly Glu Lys Leu Val Leu Asn Cys Thr Ala Arg Thr Glu Leu Asn Val
                245                 250                 255

Gly Leu Asp Phe Thr Trp His Ser Pro Pro Ser Lys Ser His His Lys
            260                 265                 270

Lys Ile Val Asn Arg Asp Val Lys Pro Phe Pro Gly Thr Val Ala Lys
        275                 280                 285

Met Phe Leu Ser Thr Leu Thr Ile Glu Ser Val Thr Lys Ser Asp Gln
    290                 295                 300

Gly Glu Tyr Thr Cys Val Ala Ser Ser Gly Arg Met Ile Lys Arg Asn
305                 310                 315                 320

Arg Thr Phe Val Arg Val His Thr Lys Pro Phe Ile Ala Phe Gly Ser
                325                 330                 335

Gly Met Lys Ser Leu Val Glu Ala Thr Val Gly Ser Gln Val Arg Ile
            340                 345                 350

Pro Val Lys Tyr Leu Ser Tyr Pro Ala Pro Asp Ile Lys Trp Tyr Arg
        355                 360                 365

Asn Gly Arg Pro Ile Glu Ser Asn Tyr Thr Met Ile Val Gly Asp Glu
    370                 375                 380

Leu Thr Ile Met Glu Val Thr Glu Arg Asp Ala Gly Asn Tyr Thr Val
385                 390                 395                 400

Ile Leu Thr Asn Pro Ile Ser Met Glu Lys Gln Ser His Met Val Ser
                405                 410                 415

Leu Val Val Asn Val Pro Pro Gln Ile Gly Glu Lys Ala Leu Ile Ser
            420                 425                 430

Pro Met Asp Ser Tyr Gln Tyr Gly Thr Met Gln Thr Leu Thr Cys Thr
        435                 440                 445

Val Tyr Ala Asn Pro Pro Leu His His Ile Gln Trp Tyr Trp Gln Leu
    450                 455                 460

Glu Glu Ala Cys Ser Tyr Arg Pro Gly Gln Thr Ser Pro Tyr Ala Cys
465                 470                 475                 480
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Lys Glu Trp Arg His Val Glu Asp Phe Gln Gly Gly Asn Lys Ile Glu
                485                 490                 495

Val Thr Lys Asn Gln Tyr Ala Leu Ile Glu Gly Lys Asn Lys Thr Val
            500                 505                 510

Ser Thr Leu Val Ile Gln Ala Ala Asn Val Ser Ala Leu Tyr Lys Cys
        515                 520                 525

Glu Ala Ile Asn Lys Ala Gly Arg Gly Glu Arg Val Ile Ser Phe His
    530                 535                 540

Val Ile Arg Gly Pro Glu Ile Thr Val Gln Pro Ala Ala Gln Pro Thr
545                 550                 555                 560

Glu Gln Glu Ser Val Ser Leu Leu Cys Thr Ala Asp Arg Asn Thr Phe
                565                 570                 575

Glu Asn Leu Thr Trp Tyr Lys Leu Gly Ser Gln Ala Thr Ser Val His
            580                 585                 590

Met Gly Glu Ser Leu Thr Pro Val Cys Lys Asn Leu Asp Ala Leu Trp
        595                 600                 605

Lys Leu Asn Gly Thr Met Phe Ser Asn Ser Thr Asn Asp Ile Leu Ile
    610                 615                 620

Val Ala Phe Gln Asn Ala Ser Leu Gln Asp Gln Gly Asp Tyr Val Cys
625                 630                 635                 640

Ser Ala Gln Asp Lys Lys Thr Lys Lys Arg His Cys Leu Val Lys Gln
                645                 650                 655

Leu Ile Ile Leu Glu Arg Met Ala Pro Met Ile Thr Gly Asn Leu Glu
            660                 665                 670

Asn Gln Thr Thr Thr Ile Gly Glu Thr Ile Glu Val Thr Cys Pro Ala
        675                 680                 685

Ser Gly Asn Pro Thr Pro His Ile Thr Trp Phe Lys Asp Asn Glu Thr
    690                 695                 700
```

```
Leu Val Glu Asp Ser Gly Ile Val Leu Arg Asp Gly Asn Arg Asn Leu
705                 710                 715                 720

Thr Ile Arg Arg Val Arg Lys Glu Asp Gly Gly Leu Tyr Thr Cys Gln
                725                 730                 735

Ala Cys Asn Val Leu Gly Cys Ala Arg Ala Glu Thr Leu Phe Ile Ile
            740                 745                 750

Glu Gly Ala Gln Glu Lys Thr Asn Leu Glu Val Ile Ile Leu Val Gly
        755                 760                 765

Thr Ala Val Ile Ala Met Phe Phe Trp Leu Leu Leu Val Ile Val Leu
    770                 775                 780

Arg Thr Val Lys Arg Ala Asn Glu Gly Glu Leu Lys Thr Gly Tyr Leu
785                 790                 795                 800

Ser Ile Val Met Asp Pro Asp Glu Leu Pro Leu Asp Glu Arg Cys Glu
                805                 810                 815

Arg Leu Pro Tyr Asp Ala Ser Lys Trp Glu Phe Pro Arg Asp Arg Leu
            820                 825                 830

Lys Leu Gly Lys Pro Leu Gly Arg Gly Ala Phe Gly Gln Val Ile Glu
        835                 840                 845

Ala Asp Ala Phe Gly Ile Asp Lys Thr Ala Thr Cys Lys Thr Val Ala
    850                 855                 860

Val Lys Met Leu Lys Glu Gly Ala Thr His Ser Glu His Arg Ala Leu
865                 870                 875                 880

Met Ser Glu Leu Lys Ile Leu Ile His Ile Gly His His Leu Asn Val
                885                 890                 895

Val Asn Leu Leu Gly Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val
            900                 905                 910

Ile Val Glu Phe Cys Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly
        915                 920                 925

Lys Arg Asn Glu Phe Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg
    930                 935                 940
```

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Gln Gly Lys Asp Tyr Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg
945                 950                 955                 960

Leu Asp Ser Ile Thr Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val
                965                 970                 975

Glu Glu Lys Ser Leu Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu
            980                 985                 990

Leu Tyr Lys Asp Phe Leu Thr Leu  Glu His Leu Ile Cys  Tyr Ser Phe
        995                 1000                1005

Gln Val  Ala Lys Gly Met Glu  Phe Leu Ala Ser Arg  Lys Cys Ile
    1010                1015                1020

His Arg  Asp Leu Ala Ala Arg  Asn Ile Leu Leu Ser  Glu Lys Asn
    1025                1030                1035

Val Val  Lys Ile Cys Asp Phe  Gly Leu Ala Arg Asp  Ile Tyr Lys
    1040                1045                1050

Asp Pro  Asp Tyr Val Arg Lys  Gly Asp Ala Arg Leu  Pro Leu Lys
    1055                1060                1065

Trp Met  Ala Pro Glu Thr Ile  Phe Asp Arg Val Tyr  Thr Ile Gln
    1070                1075                1080

Ser Asp  Val Trp Ser Phe Gly  Val Leu Leu Trp Glu  Ile Phe Ser
    1085                1090                1095

Leu Gly  Ala Ser Pro Tyr Pro  Gly Val Lys Ile Asp  Glu Glu Phe
    1100                1105                1110

Cys Arg  Arg Leu Lys Glu Gly  Thr Arg Met Arg Ala  Pro Asp Tyr
    1115                1120                1125

Thr Thr  Pro Glu Met Tyr Gln  Thr Met Leu Asp Cys  Trp His Glu
    1130                1135                1140

Asp Pro  Asn Gln Arg Pro Ser  Phe Ser Glu Leu Val  Glu His Leu
    1145                1150                1155
```

```
Gly Asn  Leu Leu Gln Ala Asn  Ala Gln Gln Asp Gly  Lys Asp Tyr
    1160                 1165                 1170

Ile Val  Leu Pro Met Ser Glu  Thr Leu Ser Met Glu  Glu Asp Ser
    1175                 1180                 1185

Gly Leu  Ser Leu Pro Thr Ser  Pro Val Ser Cys Met  Glu Glu Glu
    1190                 1195                 1200

Glu Val  Cys Asp Pro Lys Phe  His Tyr Asp Asn Thr  Ala Gly Ile
    1205                 1210                 1215

Ser His  Tyr Leu Gln Asn Ser  Lys Arg Lys Ser Arg  Pro Val Ser
    1220                 1225                 1230

Val Lys  Thr Phe Glu Asp Ile  Pro Leu Glu Glu Pro  Glu Val Lys
    1235                 1240                 1245

Val Ile  Pro Asp Asp Ser Gln  Thr Asp Ser Gly Met  Val Leu Ala
    1250                 1255                 1260

Ser Glu  Glu Leu Lys Thr Leu  Glu Asp Arg Asn Lys  Leu Ser Pro
    1265                 1270                 1275

Ser Phe  Gly Gly Met Met Pro  Ser Lys Ser Arg Glu  Ser Val Ala
    1280                 1285                 1290

Ser Glu  Gly Ser Asn Gln Thr  Ser Gly Tyr Gln Ser  Gly Tyr His
    1295                 1300                 1305

Ser Asp  Asp Thr Asp Thr Thr  Val Tyr Ser Ser Asp  Glu Ala Gly
    1310                 1315                 1320

Leu Leu  Lys Met Val Asp Ala  Ala Val His Ala Asp  Ser Gly Thr
    1325                 1330                 1335

Thr Leu  Gln Leu Thr Ser Cys  Leu Asn Gly Ser Gly  Pro Val Pro
    1340                 1345                 1350

Ala Pro  Pro Pro Thr Pro Gly  Asn His Glu Arg Gly  Ala Ala
    1355                 1360                 1365
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

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Trp	Phe	Cys	Val	Glu	Thr	Arg	Ala	Ala	Ser	Val
			15				20			
Gly	Leu	Thr	Gly	Asp	Phe	Leu	His	Pro	Pro	Lys
		25				30				
Leu	Ser	Thr	Gln	Lys	Asp	Ile	Leu	Thr	Ile	Leu
	35				40				45	
Ala	Asn	Thr	Thr	Leu	Gln	Ile	Thr	Cys	Arg	Gly
				50				55		
Gln	Arg	Asp	Leu	Asp	Trp	Leu	Trp	Pro	Asn	Ala
					60					
Gln	Arg	Asp	Ser	Glu	Glu	Arg	Val	Leu	Val	Thr
65				70				75		
Glu	Cys	Gly	Gly	Gly	Asp	Ser	Ile	Phe	Cys	Lys
				80				85		
Thr	Leu	Thr	Ile	Pro	Arg	Val	Val	Gly	Asn	Asp
					90				95	
Thr	Gly	Ala	Tyr	Lys	Cys	Ser	Tyr	Arg	Asp	Val
				100				105		
Asp	Ile							110		

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Ala Ser Thr Val Tyr Val Tyr Val Arg Asp Tyr Arg Ser Pro Phe Ile
        115                 120                 125

Ala Ser Val Ser Asp Gln His Gly Ile Val Tyr Ile Thr Glu Asn Lys
    130                 135                 140

Asn Lys Thr Val Val Ile Pro Cys Arg Gly Ser Ile Ser Asn Leu Asn
145                 150                 155                 160

Val Ser Leu Cys Ala Arg Tyr Pro Glu Lys Arg Phe Val Pro Asp Gly
                165                 170                 175

Asn Arg Ile Ser Trp Asp Ser Glu Ile Gly Phe Thr Leu Pro Ser Tyr
            180                 185                 190

Met Ile Ser Tyr Ala Gly Met Val Phe Cys Glu Ala Lys Ile Asn Asp
        195                 200                 205

Glu Thr Tyr Gln Ser Ile Met Tyr Ile Val Val Val Val Gly Tyr Arg
    210                 215                 220

Ile Tyr Asp Val Ile Leu Ser Pro Pro His Glu Ile Glu Leu Ser Ala
225                 230                 235                 240

Gly Glu Lys Leu Val Leu Asn Cys Thr Ala Arg Thr Glu Leu Asn Val
                245                 250                 255

Gly Leu Asp Phe Thr Trp His Ser Pro Pro Ser Lys Ser His His Lys
            260                 265                 270

Lys Ile Val Asn Arg Asp Val Lys Pro Phe Pro Gly Thr Val Ala Lys
        275                 280                 285

Met Phe Leu Ser Thr Leu Thr Ile Glu Ser Val Thr Lys Ser Asp Gln
    290                 295                 300

Gly Glu Tyr Thr Cys Val Ala Ser Ser Gly Arg Met Ile Lys Arg Asn
305                 310                 315                 320

Arg Thr Phe Val Arg Val His Thr Lys Pro Phe Ile Ala Phe Gly Ser
                325                 330                 335
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Gly Met Lys Ser Leu Val Glu Ala Thr Val Gly Ser Gln Val Arg Ile
340 345 350

Pro Val Lys Tyr Leu Ser Tyr Pro Ala Pro Asp Ile Lys Trp Tyr Arg
355 360 365

Asn Gly Arg Pro Ile Glu Ser Asn Tyr Thr Met Ile Val Gly Asp Glu
370 375 380

Leu Thr Ile Met Glu Val Thr Glu Arg Asp Ala Gly Asn Tyr Thr Val
385 390 395 400

Ile Leu Thr Asn Pro Ile Ser Met Glu Lys Gln Ser His Met Val Ser
405 410 415

Leu Val Val Asn Val Pro Pro Gln Ile Gly Glu Lys Ala Leu Ile Ser
420 425 430

Pro Met Asp Ser Tyr Gln Tyr Gly Thr Met Gln Thr Leu Thr Cys Thr
435 440 445

Val Tyr Ala Asn Pro Pro Leu His His Ile Gln Trp Tyr Trp Gln Leu
450 455 460

Glu Glu Ala Cys Ser Tyr Arg Pro Gly Gln Thr Ser Pro Tyr Ala Cys
465 470 475 480

Lys Glu Trp Arg His Val Glu Asp Phe Gln Gly Gly Asn Lys Ile Glu
485 490 495

Val Thr Lys Asn Gln Tyr Ala Leu Ile Glu Gly Lys Asn Lys Thr Val
500 505 510

Ser Thr Leu Val Ile Gln Ala Ala Asn Val Ser Ala Leu Tyr Lys Cys
515 520 525

Glu Ala Ile Asn Lys Ala Gly Arg Gly Glu Arg Val Ile Ser Phe His
530 535 540

Val Ile Arg Gly Pro Glu Ile Thr Val Gln Pro Ala Ala Gln Pro Thr
545 550 555 560

Glu Gln Glu Ser Val Ser Leu Leu Cys Thr Ala Asp Arg Asn Thr Phe
565 570 575

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Glu Asn Leu Thr Trp Tyr Lys Leu Gly Ser Gln Ala Thr Ser Val His
            580                 585                 590

Met Gly Glu Ser Leu Thr Pro Val Cys Lys Asn Leu Asp Ala Leu Trp
        595                 600                 605

Lys Leu Asn Gly Thr Met Phe Ser Asn Ser Thr Asn Asp Ile Leu Ile
    610                 615                 620

Val Ala Phe Gln Asn Ala Ser Leu Gln Asp Gln Gly Asp Tyr Val Cys
625                 630                 635                 640

Ser Ala Gln Asp Lys Lys Thr Lys Lys Arg His Cys Leu Val Lys Gln
                645                 650                 655

Leu Ile Ile Leu Glu Arg Met Ala Pro Met Ile Thr Gly Asn Leu Glu
            660                 665                 670

Asn Gln Thr Thr Thr Ile Gly Glu Thr Ile Glu Val Thr Cys Pro Ala
        675                 680                 685

Ser Gly Asn Pro Thr Pro His Ile Thr Trp Phe Lys Asp Asn Glu Thr
    690                 695                 700

Leu Val Glu Asp Ser Gly Ile Val Leu Arg Asp Gly Asn Arg Asn Leu
705                 710                 715                 720

Thr Ile Arg Arg Val Arg Lys Glu Asp Gly Gly Leu Tyr Thr Cys Gln
                725                 730                 735

Ala Cys Asn Val Leu Gly Cys Ala Arg Ala Glu Thr Leu Phe Ile Ile
            740                 745                 750

Glu Gly Ala Gln Glu Lys Thr Asn Leu Glu Val Ile Ile Leu Val Gly
        755                 760                 765

Thr Ala Val Ile Ala Met Phe Phe Trp Leu Leu Leu Val Ile Val Leu
    770                 775                 780

Arg Thr Val Lys Arg Ala Asn Glu Gly Glu Leu Lys Thr Gly Tyr Leu
785                 790                 795                 800
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Ser Ile Val Met Asp Pro
805

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<212> PRT
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20 25 30

Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly Lys Arg Asn Glu Phe
35 40 45

Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg Gln Gly Lys Asp Tyr
50 55 60

Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg Leu Asp Ser Ile Thr
65 70 75 80

Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser Leu
85 90 95

Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu Leu Tyr Lys Asp Phe
100 105 110

Leu Thr Leu Glu His Leu Ile Cys Tyr Ser Phe Gln Val Ala Lys Gly
115 120 125

Met Glu Phe Leu Ala Ser Arg Lys Cys Ile His Arg Asp Leu Ala Ala
130 135 140

Arg Asn Ile Leu Leu Ser Glu Lys Asn Val Val Lys Ile Cys Asp Phe
145 150 155 160

Gly Leu Ala Arg Asp Ile Tyr Lys Asp Pro Asp Tyr Val Arg Lys Gly
165 170 175

Asp Ala Arg Leu
180

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cggctggagc cagggcgccg gtgccccgcg ctctccccgg tcttgcgctg cgggggccat 120

accgcctctg tgacttcttt gcgggccagg gacggagaag gagtctgtgc ctgagaaact 180

gggctctgtg cccaggcgcg aggtgcagg atg gag agc aag gcg ctg cta gct 233
Met Glu Ser Lys Ala Leu Leu Ala
1 5

gtc gct ctg tgg ttc tgc gtg gag acc cga gcc gcc tct gtg ggt ttg 281
Val Ala Leu Trp Phe Cys Val Glu Thr Arg Ala Ala Ser Val Gly Leu
10 15 20

act ggc gat ttt ctc cat ccc ccc aag ctc agc aca cag aaa gac ata 329
Thr Gly Asp Phe Leu His Pro Pro Lys Leu Ser Thr Gln Lys Asp Ile
25 30 35 40

ctg aca att ttg gca aat aca acc ctt cag att act tgc agg gga cag 377
Leu Thr Ile Leu Ala Asn Thr Thr Leu Gln Ile Thr Cys Arg Gly Gln
45 50 55

cgg gac ctg gac tgg ctt tgg ccc aat gct cag cgt gat tct gag gaa 425
Arg Asp Leu Asp Trp Leu Trp Pro Asn Ala Gln Arg Asp Ser Glu Glu
60 65 70

agg gta ttg gtg act gaa tgc ggc ggt ggt gac agt atc ttc tgc aaa 473
Arg Val Leu Val Thr Glu Cys Gly Gly Gly Asp Ser Ile Phe Cys Lys
75 80 85

aca ctc acc att ccc agg gtg gtt gga aat gat act gga gcc tac aag 521
Thr Leu Thr Ile Pro Arg Val Val Gly Asn Asp Thr Gly Ala Tyr Lys
90 95 100

tgc tcg tac cgg gac gtc gac ata gcc tcc act gtt tat gtc tat gtt 569
Cys Ser Tyr Arg Asp Val Asp Ile Ala Ser Thr Val Tyr Val Tyr Val
105 110 115 120

cga gat tac aga tca cca ttc atc gcc tct gtc agt gac cag cat ggc 617
Arg Asp Tyr Arg Ser Pro Phe Ile Ala Ser Val Ser Asp Gln His Gly
125 130 135

atc gtg tac atc acc gag aac aag aac aaa act gtg gtg atc ccc tgc 665
Ile Val Tyr Ile Thr Glu Asn Lys Asn Lys Thr Val Val Ile Pro Cys
140 145 150

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cga ggg tcg att tca aac ctc aat gtg tct ctt tgc gct agg tat cca      713
Arg Gly Ser Ile Ser Asn Leu Asn Val Ser Leu Cys Ala Arg Tyr Pro
        155                 160                 165

gaa aag aga ttt gtt ccg gat gga aac aga att tcc tgg gac agc gag      761
Glu Lys Arg Phe Val Pro Asp Gly Asn Arg Ile Ser Trp Asp Ser Glu
    170                 175                 180

ata ggc ttt act ctc ccc agt tac atg atc agc tat gcc ggc atg gtc      809
Ile Gly Phe Thr Leu Pro Ser Tyr Met Ile Ser Tyr Ala Gly Met Val
185                 190                 195                 200

ttc tgt gag gca aag atc aat gat gaa acc tat cag tct atc atg tac      857
Phe Cys Glu Ala Lys Ile Asn Asp Glu Thr Tyr Gln Ser Ile Met Tyr
                205                 210                 215

ata gtt gtg gtt gta gga tat agg att tat gat gtg att ctg agc ccc      905
Ile Val Val Val Val Gly Tyr Arg Ile Tyr Asp Val Ile Leu Ser Pro
            220                 225                 230

ccg cat gaa att gag cta tct gcc gga gaa aaa ctt gtc tta aat tgt      953
Pro His Glu Ile Glu Leu Ser Ala Gly Glu Lys Leu Val Leu Asn Cys
        235                 240                 245

aca gcg aga aca gag ctc aat gtg ggg ctt gat ttc acc tgg cac tct     1001
Thr Ala Arg Thr Glu Leu Asn Val Gly Leu Asp Phe Thr Trp His Ser
    250                 255                 260

cca cct tca aag tct cat cat aag aag att gta aac cgg gat gtg aaa     1049
Pro Pro Ser Lys Ser His His Lys Lys Ile Val Asn Arg Asp Val Lys
265                 270                 275                 280

ccc ttt cct ggg act gtg gcg aag atg ttt ttg agc acc ttg aca ata     1097
Pro Phe Pro Gly Thr Val Ala Lys Met Phe Leu Ser Thr Leu Thr Ile
                285                 290                 295

gaa agt gtg acc aag agt gac caa ggg gaa tac acc tgt gta gcg tcc     1145
Glu Ser Val Thr Lys Ser Asp Gln Gly Glu Tyr Thr Cys Val Ala Ser
            300                 305                 310

agt gga cgg atg atc aag aga aat aga aca ttt gtc cga gtt cac aca     1193
Ser Gly Arg Met Ile Lys Arg Asn Arg Thr Phe Val Arg Val His Thr
        315                 320                 325

aag cct ttt att gct ttc ggt agt ggg atg aaa tct ttg gtg gaa gcc     1241
Lys Pro Phe Ile Ala Phe Gly Ser Gly Met Lys Ser Leu Val Glu Ala
    330                 335                 340

aca gtg ggc agt caa gtc cga atc cct gtg aag tat ctc agt tac cca     1289
Thr Val Gly Ser Gln Val Arg Ile Pro Val Lys Tyr Leu Ser Tyr Pro
345                 350                 355                 360

gct cct gat atc aaa tgg tac aga aat gga agg ccc att gag tcc aac     1337
Ala Pro Asp Ile Lys Trp Tyr Arg Asn Gly Arg Pro Ile Glu Ser Asn
                365                 370                 375
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tac aca atg att gtt ggc gat gaa ctc acc atc atg gaa gtg act gaa      1385
Tyr Thr Met Ile Val Gly Asp Glu Leu Thr Ile Met Glu Val Thr Glu
            380                 385                 390

aga gat gca gga aac tac acg gtc atc ctc acc aac ccc att tca atg      1433
Arg Asp Ala Gly Asn Tyr Thr Val Ile Leu Thr Asn Pro Ile Ser Met
        395                 400                 405

gag aaa cag agc cac atg gtc tct ctg gtt gtg aat gtc cca ccc cag      1481
Glu Lys Gln Ser His Met Val Ser Leu Val Val Asn Val Pro Pro Gln
    410                 415                 420

atc ggt gag aaa gcc ttg atc tcg cct atg gat tcc tac cag tat ggg      1529
Ile Gly Glu Lys Ala Leu Ile Ser Pro Met Asp Ser Tyr Gln Tyr Gly
425                 430                 435                 440

acc atg cag aca ttg aca tgc aca gtc tac gcc aac cct ccc ctg cac      1577
Thr Met Gln Thr Leu Thr Cys Thr Val Tyr Ala Asn Pro Pro Leu His
                445                 450                 455

cac atc cag tgg tac tgg cag cta gaa gaa gcc tgc tcc tac aga ccc      1625
His Ile Gln Trp Tyr Trp Gln Leu Glu Glu Ala Cys Ser Tyr Arg Pro
            460                 465                 470

ggc caa aca agc ccg tat gct tgt aaa gaa tgg aga cac gtg gag gat      1673
Gly Gln Thr Ser Pro Tyr Ala Cys Lys Glu Trp Arg His Val Glu Asp
        475                 480                 485

ttc cag ggg gga aac aag atc gaa gtc acc aaa aac caa tat gcc ctg      1721
Phe Gln Gly Gly Asn Lys Ile Glu Val Thr Lys Asn Gln Tyr Ala Leu
    490                 495                 500

att gaa gga aaa aac aaa act gta agt acg ctg gtc atc caa gct gcc      1769
Ile Glu Gly Lys Asn Lys Thr Val Ser Thr Leu Val Ile Gln Ala Ala
505                 510                 515                 520

aac gtg tca gcg ttg tac aaa tgt gaa gcc atc aac aaa gcg gga cga      1817
Asn Val Ser Ala Leu Tyr Lys Cys Glu Ala Ile Asn Lys Ala Gly Arg
                525                 530                 535

gga gag agg gtc atc tcc ttc cat gtg atc agg ggt cct gaa att act      1865
Gly Glu Arg Val Ile Ser Phe His Val Ile Arg Gly Pro Glu Ile Thr
            540                 545                 550

gtg caa cct gct gcc cag cca act gag cag gag agt gtg tcc ctg ttg      1913
Val Gln Pro Ala Ala Gln Pro Thr Glu Gln Glu Ser Val Ser Leu Leu
        555                 560                 565

tgc act gca gac aga aat acg ttt gag aac ctc acg tgg tac aag ctt      1961
Cys Thr Ala Asp Arg Asn Thr Phe Glu Asn Leu Thr Trp Tyr Lys Leu
    570                 575                 580

ggc tca cag gca aca tcg gtc cac atg ggc gaa tca ctc aca cca gtt      2009
Gly Ser Gln Ala Thr Ser Val His Met Gly Glu Ser Leu Thr Pro Val
585                 590                 595                 600
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tgc aag aac ttg gat gct ctt tgg aaa ctg aat ggc acc atg ttt tct     2057
Cys Lys Asn Leu Asp Ala Leu Trp Lys Leu Asn Gly Thr Met Phe Ser
                605                 610                 615

aac agc aca aat gac atc ttg att gtg gca ttt cag aat gcc tct ctg     2105
Asn Ser Thr Asn Asp Ile Leu Ile Val Ala Phe Gln Asn Ala Ser Leu
            620                 625                 630

cag gac caa ggc gac tat gtt tgc tct gct caa gat aag aag acc aag     2153
Gln Asp Gln Gly Asp Tyr Val Cys Ser Ala Gln Asp Lys Lys Thr Lys
        635                 640                 645

aaa aga cat tgc ctg gtc aaa cag ctc atc atc cta gag cgc atg gca     2201
Lys Arg His Cys Leu Val Lys Gln Leu Ile Ile Leu Glu Arg Met Ala
    650                 655                 660

ccc atg atc acc gga aat ctg gag aat cag aca aca acc att ggc gag     2249
Pro Met Ile Thr Gly Asn Leu Glu Asn Gln Thr Thr Thr Ile Gly Glu
665                 670                 675                 680

acc att gaa gtg act tgc cca gca tct gga aat cct acc cca cac att     2297
Thr Ile Glu Val Thr Cys Pro Ala Ser Gly Asn Pro Thr Pro His Ile
                685                 690                 695

aca tgg ttc aaa gac aac gag acc ctg gta gaa gat tca ggc att gta     2345
Thr Trp Phe Lys Asp Asn Glu Thr Leu Val Glu Asp Ser Gly Ile Val
            700                 705                 710

ctg aga gat ggg aac cgg aac ctg act atc cgc agg gtg agg aag gag     2393
Leu Arg Asp Gly Asn Arg Asn Leu Thr Ile Arg Arg Val Arg Lys Glu
        715                 720                 725

gat gga ggc ctc tac acc tgc cag gcc tgc aat gtc ctt ggc tgt gca     2441
Asp Gly Gly Leu Tyr Thr Cys Gln Ala Cys Asn Val Leu Gly Cys Ala
    730                 735                 740

aga gcg gag acg ctc ttc ata ata gaa ggt gcc cag gaa aag acc aac     2489
Arg Ala Glu Thr Leu Phe Ile Ile Glu Gly Ala Gln Glu Lys Thr Asn
745                 750                 755                 760

ttg gaa gtc att atc ctc gtc ggc act gca gtg att gcc atg ttc ttc     2537
Leu Glu Val Ile Ile Leu Val Gly Thr Ala Val Ile Ala Met Phe Phe
                765                 770                 775

tgg ctc ctt ctt gtc att gtc cta cgg acc gtt aag cgg gcc aat gaa     2585
Trp Leu Leu Leu Val Ile Val Leu Arg Thr Val Lys Arg Ala Asn Glu
            780                 785                 790

ggg gaa ctg aag aca ggc tac ttg tct att gtc atg gat cca gat gaa     2633
Gly Glu Leu Lys Thr Gly Tyr Leu Ser Ile Val Met Asp Pro Asp Glu
        795                 800                 805

ttg ccc ttg gat gag cgc tgt gaa cgc ttg cct tat gat gcc agc aag     2681
Leu Pro Leu Asp Glu Arg Cys Glu Arg Leu Pro Tyr Asp Ala Ser Lys
    810                 815                 820
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tgg gaa ttc ccc agg gac cgg ctg aaa cta gga aaa cct ctt ggc cgc      2729
Trp Glu Phe Pro Arg Asp Arg Leu Lys Leu Gly Lys Pro Leu Gly Arg
825                 830                 835                 840

ggt gcc ttc ggc caa gtg att gag gca gac gct ttt gga att gac aag      2777
Gly Ala Phe Gly Gln Val Ile Glu Ala Asp Ala Phe Gly Ile Asp Lys
                845                 850                 855

aca gcg act tgc aaa aca gta gcc gtc aag atg ttg aaa gaa gga gca      2825
Thr Ala Thr Cys Lys Thr Val Ala Val Lys Met Leu Lys Glu Gly Ala
            860                 865                 870

aca cac agc gag cat cga gcc ctc atg tct gaa ctc aag atc ctc atc      2873
Thr His Ser Glu His Arg Ala Leu Met Ser Glu Leu Lys Ile Leu Ile
        875                 880                 885

cac att ggt cac cat ctc aat gtg gtg aac ctc cta ggc gcc tgc acc      2921
His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly Ala Cys Thr
    890                 895                 900

aag ccg gga ggg cct ctc atg gtg att ctg caa ttc tcg aag ttt gga      2969
Lys Pro Gly Gly Pro Leu Met Val Ile Leu Gln Phe Ser Lys Phe Gly
905                 910                 915                 920

aac cta tca act tac tta cgg ggc aag aga aat gaa ttt gtt ccc tat      3017
Asn Leu Ser Thr Tyr Leu Arg Gly Lys Arg Asn Glu Phe Val Pro Tyr
                925                 930                 935

aag agc aaa ggg gca cgc ttc cgc cag ggc aag gac tac gtt ggg gag      3065
Lys Ser Lys Gly Ala Arg Phe Arg Gln Gly Lys Asp Tyr Val Gly Glu
            940                 945                 950

ctc tcc gtg gat ctg aaa aga cgc ttg gac agc atc acc agc agc cag      3113
Leu Ser Val Asp Leu Lys Arg Arg Leu Asp Ser Ile Thr Ser Ser Gln
        955                 960                 965

agc tct gcc agc tca ggc ttt gtt gag gag aaa tcg ctc agt gat gta      3161
Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser Leu Ser Asp Val
    970                 975                 980

gag gaa gaa gaa gct tct gaa gaa ctg tac aag gac ttc ctg acc ttg      3209
Glu Glu Glu Glu Ala Ser Glu Glu Leu Tyr Lys Asp Phe Leu Thr Leu
985                 990                 995                1000

gag cat ctc atc tgt  tac agc ttc caa gtg  gct aag ggc atg gag        3254
Glu His Leu Ile Cys  Tyr Ser Phe Gln Val  Ala Lys Gly Met Glu
                1005                1010                1015

ttc ttg gca tca agg  aag tgt atc cac agg  gac ctg gca gca cga        3299
Phe Leu Ala Ser Arg  Lys Cys Ile His Arg  Asp Leu Ala Ala Arg
                1020                1025                1030

aac att ctc cta tcg  gag aag aat gtg gtt  aag atc tgt gac ttc        3344
Asn Ile Leu Leu Ser  Glu Lys Asn Val Val  Lys Ile Cys Asp Phe
                1035                1040                1045
```

```
ggc ttg gcc cgg gac  att tat aaa gac ccg  gat tat gtc aga aaa       3389
Gly Leu Ala Arg Asp  Ile Tyr Lys Asp Pro  Asp Tyr Val Arg Lys
                1050                1055                1060

gga gat gcc cga ctc  cct ttg aag tgg atg  gcc ccg gaa acc att       3434
Gly Asp Ala Arg Leu  Pro Leu Lys Trp Met  Ala Pro Glu Thr Ile
                1065                1070                1075

ttt gac aga gta tac  aca att cag agc gat  gtg tgg tct ttc ggt       3479
Phe Asp Arg Val Tyr  Thr Ile Gln Ser Asp  Val Trp Ser Phe Gly
                1080                1085                1090

gtg ttg ctc tgg gaa  ata ttt tcc tta ggt  gcc tcc cca tac cct       3524
Val Leu Leu Trp Glu  Ile Phe Ser Leu Gly  Ala Ser Pro Tyr Pro
                1095                1100                1105

ggg gtc aag att gat  gaa gaa ttt tgt agg  aga ttg aaa gaa gga       3569
Gly Val Lys Ile Asp  Glu Glu Phe Cys Arg  Arg Leu Lys Glu Gly
                1110                1115                1120

act aga atg cgg gct  cct gac tac act acc  cca gaa atg tac cag       3614
Thr Arg Met Arg Ala  Pro Asp Tyr Thr Thr  Pro Glu Met Tyr Gln
                1125                1130                1135

acc atg ctg gac tgc  tgg cat gag gac ccc  aac cag aga ccc tcg       3659
Thr Met Leu Asp Cys  Trp His Glu Asp Pro  Asn Gln Arg Pro Ser
                1140                1145                1150

ttt tca gag ttg gtg  gag cat ttg gga aac  ctc ctg caa gca aat       3704
Phe Ser Glu Leu Val  Glu His Leu Gly Asn  Leu Leu Gln Ala Asn
                1155                1160                1165

gcg cag cag gat ggc  aaa gac tat att gtt  ctt cca atg tca gag       3749
Ala Gln Gln Asp Gly  Lys Asp Tyr Ile Val  Leu Pro Met Ser Glu
                1170                1175                1180

aca ctg agc atg gaa  gag gat tct gga ctc  tcc ctg cct acc tca       3794
Thr Leu Ser Met Glu  Glu Asp Ser Gly Leu  Ser Leu Pro Thr Ser
                1185                1190                1195

cct gtt tcc tgt atg  gag gaa gag gaa gtg  tgc gac ccc aaa ttc       3839
Pro Val Ser Cys Met  Glu Glu Glu Glu Val  Cys Asp Pro Lys Phe
                1200                1205                1210

cat tat gac aac aca  gca gga atc agt cat  tat ctc cag aac agt       3884
His Tyr Asp Asn Thr  Ala Gly Ile Ser His  Tyr Leu Gln Asn Ser
                1215                1220                1225

aag cga aag agc cgg  cca gtg agt gta aaa  aca ttt gaa gat atc       3929
Lys Arg Lys Ser Arg  Pro Val Ser Val Lys  Thr Phe Glu Asp Ile
                1230                1235                1240

cca ttg gag gaa cca  gaa gta aaa gtg atc  cca gat gac agc cag       3974
Pro Leu Glu Glu Pro  Glu Val Lys Val Ile  Pro Asp Asp Ser Gln
                1245                1250                1255
```

```
aca gac agt ggg atg  gtc ctt gca tca gaa  gag ctg aaa act ctg       4019
Thr Asp Ser Gly Met  Val Leu Ala Ser Glu  Glu Leu Lys Thr Leu
                1260                1265                1270

gaa gac agg aac aaa  tta tct cca tct ttt  ggt gga atg atg ccc       4064
Glu Asp Arg Asn Lys  Leu Ser Pro Ser Phe  Gly Gly Met Met Pro
                1275                1280                1285

agt aaa agc agg gag  tct gtg gcc tcg gaa  ggc tcc aac cag acc       4109
Ser Lys Ser Arg Glu  Ser Val Ala Ser Glu  Gly Ser Asn Gln Thr
                1290                1295                1300

agt ggc tac cag tct  ggg tat cac tca gat  gac aca gac acc acc       4154
Ser Gly Tyr Gln Ser  Gly Tyr His Ser Asp  Asp Thr Asp Thr Thr
                1305                1310                1315

gtg tac tcc agc gac  gag gca gga ctt tta  aag atg gtg gat gct       4199
Val Tyr Ser Ser Asp  Glu Ala Gly Leu Leu  Lys Met Val Asp Ala
                1320                1325                1330

gca gtt cac gct gac  tca ggg acc aca ctg  agc tca cct cct gtt       4244
Ala Val His Ala Asp  Ser Gly Thr Thr Leu  Ser Ser Pro Pro Val
                1335                1340                1345

taaatggaag tggtcctgtc ccggctccgc ccccaactcc tggaaatcac gagagaggtg   4304

ctgcttagat tttcaagtgt tgttctttcc accacccgga agtagccaca tttgattttc   4364

atttttggag gagggacctc agactgcaag gagcttgtcc tcagggcatt tccagagaag   4424

atgcccatga cccaagaatg tgttgactct actctctttt ccattcattt aaaagtccta   4484

tataatgtgc cctgctgtgg tctcactacc agttaaagca aaagactttc aaacacgtgg   4544

actctgtcct ccaagaagtg gcaacggcac ctctgtgaaa ctggatcgaa tgggcaatgc   4604

tttgtgtgtt gaggatgggt gagatgtccc agggccgagt ctgtctacct tggaggcttt   4664

gtggaggatg cgggctatga gccaagtgtt aagtgtggga tgtggactgg gaggaaggaa   4724

ggcgcaagcc gtccggagag cggttggagc ctgcagatgc attgtgctgg ctctggtgga   4784

ggtgggcttg tggcctgtca ggaaacgcaa aggcggccgg cagggtttgg ttttggaagg   4844

tttgcgtgct cttcacagtc gggttacagg cgagttccct gtggcgtttc ctactcctaa   4904

tgagagttcc ttccggactc ttacgtgtct cctggcctgg ccccaggaag gaaatgatgc   4964

agcttgctcc ttcctcatct ctcaggctgt gccttaattc agaacaccaa aagagaggaa   5024

cgtcggcaga ggctcctgac ggggccgaag aattgtgaga acagaacaga aactcagggt   5084

ttctgctggg tggagaccca cgtggcgccc tggtggcagg tctgagggtt ctctgtcaag   5144

tggcggtaaa ggctcaggct ggtgttcttc ctctatctcc actcctgtca ggcccccaag   5204

tcctcagtat tttagctttg tggcttcctg atggcagaaa aatcttaatt ggttggtttg   5264
```

ctctccagat aatcactagc cagatttcga aattactttt tagccgaggt tatgataaca 5324

tctactgtat cctttagaat tttaacctat aaaactatgt ctactggttt ctgcctgtgt 5384

gcttatgtt 5393

<210> 8
<211> 1345
<212> PRT
<213> Mus sp.

<400> 8

```
Met Glu Ser Lys Ala Leu Leu Ala Val Ala Leu Trp Phe Cys Val Glu
1               5                  10                  15

Thr Arg Ala Ala Ser Val Gly Leu Thr Gly Asp Phe Leu His Pro Pro
            20                  25                  30

Lys Leu Ser Thr Gln Lys Asp Ile Leu Thr Ile Leu Ala Asn Thr Thr
        35                  40                  45

Leu Gln Ile Thr Cys Arg Gly Gln Arg Asp Leu Asp Trp Leu Trp Pro
    50                  55                  60

Asn Ala Gln Arg Asp Ser Glu Glu Arg Val Leu Val Thr Glu Cys Gly
65                  70                  75                  80

Gly Gly Asp Ser Ile Phe Cys Lys Thr Leu Thr Ile Pro Arg Val Val
                85                  90                  95

Gly Asn Asp Thr Gly Ala Tyr Lys Cys Ser Tyr Arg Asp Val Asp Ile
            100                 105                 110

Ala Ser Thr Val Tyr Val Tyr Val Arg Asp Tyr Arg Ser Pro Phe Ile
        115                 120                 125

Ala Ser Val Ser Asp Gln His Gly Ile Val Tyr Ile Thr Glu Asn Lys
    130                 135                 140

Asn Lys Thr Val Val Ile Pro Cys Arg Gly Ser Ile Ser Asn Leu Asn
145                 150                 155                 160

Val Ser Leu Cys Ala Arg Tyr Pro Glu Lys Arg Phe Val Pro Asp Gly
                165                 170                 175
```

```
Asn Arg Ile Ser Trp Asp Ser Glu Ile Gly Phe Thr Leu Pro Ser Tyr
            180                 185                 190

Met Ile Ser Tyr Ala Gly Met Val Phe Cys Glu Ala Lys Ile Asn Asp
        195                 200                 205

Glu Thr Tyr Gln Ser Ile Met Tyr Ile Val Val Val Val Gly Tyr Arg
    210                 215                 220

Ile Tyr Asp Val Ile Leu Ser Pro Pro His Glu Ile Glu Leu Ser Ala
225                 230                 235                 240

Gly Glu Lys Leu Val Leu Asn Cys Thr Ala Arg Thr Glu Leu Asn Val
                245                 250                 255

Gly Leu Asp Phe Thr Trp His Ser Pro Pro Ser Lys Ser His His Lys
            260                 265                 270

Lys Ile Val Asn Arg Asp Val Lys Pro Phe Pro Gly Thr Val Ala Lys
        275                 280                 285

Met Phe Leu Ser Thr Leu Thr Ile Glu Ser Val Thr Lys Ser Asp Gln
    290                 295                 300

Gly Glu Tyr Thr Cys Val Ala Ser Ser Gly Arg Met Ile Lys Arg Asn
305                 310                 315                 320

Arg Thr Phe Val Arg Val His Thr Lys Pro Phe Ile Ala Phe Gly Ser
                325                 330                 335

Gly Met Lys Ser Leu Val Glu Ala Thr Val Gly Ser Gln Val Arg Ile
            340                 345                 350

Pro Val Lys Tyr Leu Ser Tyr Pro Ala Pro Asp Ile Lys Trp Tyr Arg
        355                 360                 365

Asn Gly Arg Pro Ile Glu Ser Asn Tyr Thr Met Ile Val Gly Asp Glu
    370                 375                 380

Leu Thr Ile Met Glu Val Thr Glu Arg Asp Ala Gly Asn Tyr Thr Val
385                 390                 395                 400

Ile Leu Thr Asn Pro Ile Ser Met Glu Lys Gln Ser His Met Val Ser
                405                 410                 415
```

```
Leu Val Val Asn Val Pro Pro Gln Ile Gly Glu Lys Ala Leu Ile Ser
            420                 425                 430

Pro Met Asp Ser Tyr Gln Tyr Gly Thr Met Gln Thr Leu Thr Cys Thr
        435                 440                 445

Val Tyr Ala Asn Pro Pro Leu His His Ile Gln Trp Tyr Trp Gln Leu
    450                 455                 460

Glu Glu Ala Cys Ser Tyr Arg Pro Gly Gln Thr Ser Pro Tyr Ala Cys
465                 470                 475                 480

Lys Glu Trp Arg His Val Glu Asp Phe Gln Gly Gly Asn Lys Ile Glu
                485                 490                 495

Val Thr Lys Asn Gln Tyr Ala Leu Ile Glu Gly Lys Asn Lys Thr Val
            500                 505                 510

Ser Thr Leu Val Ile Gln Ala Ala Asn Val Ser Ala Leu Tyr Lys Cys
        515                 520                 525

Glu Ala Ile Asn Lys Ala Gly Arg Gly Glu Arg Val Ile Ser Phe His
    530                 535                 540

Val Ile Arg Gly Pro Glu Ile Thr Val Gln Pro Ala Ala Gln Pro Thr
545                 550                 555                 560

Glu Gln Glu Ser Val Ser Leu Leu Cys Thr Ala Asp Arg Asn Thr Phe
                565                 570                 575

Glu Asn Leu Thr Trp Tyr Lys Leu Gly Ser Gln Ala Thr Ser Val His
            580                 585                 590

Met Gly Glu Ser Leu Thr Pro Val Cys Lys Asn Leu Asp Ala Leu Trp
        595                 600                 605

Lys Leu Asn Gly Thr Met Phe Ser Asn Ser Thr Asn Asp Ile Leu Ile
    610                 615                 620

Val Ala Phe Gln Asn Ala Ser Leu Gln Asp Gln Gly Asp Tyr Val Cys
625                 630                 635                 640
```

Ser Ala Gln Asp Lys Lys Thr Lys Lys Arg His Cys Leu Val Lys Gln
645 650 655

Leu Ile Ile Leu Glu Arg Met Ala Pro Met Ile Thr Gly Asn Leu Glu
660 665 670

Asn Gln Thr Thr Thr Ile Gly Glu Thr Ile Glu Val Thr Cys Pro Ala
675 680 685

Ser Gly Asn Pro Thr Pro His Ile Thr Trp Phe Lys Asp Asn Glu Thr
690 695 700

Leu Val Glu Asp Ser Gly Ile Val Leu Arg Asp Gly Asn Arg Asn Leu
705 710 715 720

Thr Ile Arg Arg Val Arg Lys Glu Asp Gly Gly Leu Tyr Thr Cys Gln
725 730 735

Ala Cys Asn Val Leu Gly Cys Ala Arg Ala Glu Thr Leu Phe Ile Ile
740 745 750

Glu Gly Ala Gln Glu Lys Thr Asn Leu Glu Val Ile Ile Leu Val Gly
755 760 765

Thr Ala Val Ile Ala Met Phe Phe Trp Leu Leu Leu Val Ile Val Leu
770 775 780

Arg Thr Val Lys Arg Ala Asn Glu Gly Glu Leu Lys Thr Gly Tyr Leu
785 790 795 800

Ser Ile Val Met Asp Pro Asp Glu Leu Pro Leu Asp Glu Arg Cys Glu
805 810 815

Arg Leu Pro Tyr Asp Ala Ser Lys Trp Glu Phe Pro Arg Asp Arg Leu
820 825 830

Lys Leu Gly Lys Pro Leu Gly Arg Gly Ala Phe Gly Gln Val Ile Glu
835 840 845

Ala Asp Ala Phe Gly Ile Asp Lys Thr Ala Thr Cys Lys Thr Val Ala
850 855 860

Val Lys Met Leu Lys Glu Gly Ala Thr His Ser Glu His Arg Ala Leu
865 870 875 880

```
Met Ser Glu Leu Lys Ile Leu Ile His Ile Gly His His Leu Asn Val
                885                 890                 895

Val Asn Leu Leu Gly Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val
            900                 905                 910

Ile Leu Gln Phe Ser Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly
        915                 920                 925

Lys Arg Asn Glu Phe Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg
    930                 935                 940

Gln Gly Lys Asp Tyr Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg
945                 950                 955                 960

Leu Asp Ser Ile Thr Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val
                965                 970                 975

Glu Glu Lys Ser Leu Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu
            980                 985                 990

Leu Tyr Lys Asp Phe Leu Thr Leu  Glu His Leu Ile Cys  Tyr Ser Phe
        995                 1000                1005

Gln Val  Ala Lys Gly Met Glu  Phe Leu Ala Ser Arg  Lys Cys Ile
    1010                1015                1020

His Arg  Asp Leu Ala Ala Arg  Asn Ile Leu Leu Ser  Glu Lys Asn
    1025                1030                1035

Val Val  Lys Ile Cys Asp Phe  Gly Leu Ala Arg Asp  Ile Tyr Lys
    1040                1045                1050

Asp Pro  Asp Tyr Val Arg Lys  Gly Asp Ala Arg Leu  Pro Leu Lys
    1055                1060                1065

Trp Met  Ala Pro Glu Thr Ile  Phe Asp Arg Val Tyr  Thr Ile Gln
    1070                1075                1080

Ser Asp  Val Trp Ser Phe Gly  Val Leu Leu Trp Glu  Ile Phe Ser
    1085                1090                1095
```

```
Leu Gly  Ala Ser Pro Tyr Pro  Gly Val Lys Ile Asp  Glu Glu Phe
     1100                 1105                 1110

Cys Arg  Arg Leu Lys Glu Gly  Thr Arg Met Arg Ala  Pro Asp Tyr
     1115                 1120                 1125

Thr Thr  Pro Glu Met Tyr Gln  Thr Met Leu Asp Cys  Trp His Glu
     1130                 1135                 1140

Asp Pro  Asn Gln Arg Pro Ser  Phe Ser Glu Leu Val  Glu His Leu
     1145                 1150                 1155

Gly Asn  Leu Leu Gln Ala Asn  Ala Gln Gln Asp Gly  Lys Asp Tyr
     1160                 1165                 1170

Ile Val  Leu Pro Met Ser Glu  Thr Leu Ser Met Glu  Glu Asp Ser
     1175                 1180                 1185

Gly Leu  Ser Leu Pro Thr Ser  Pro Val Ser Cys Met  Glu Glu Glu
     1190                 1195                 1200

Glu Val  Cys Asp Pro Lys Phe  His Tyr Asp Asn Thr  Ala Gly Ile
     1205                 1210                 1215

Ser His  Tyr Leu Gln Asn Ser  Lys Arg Lys Ser Arg  Pro Val Ser
     1220                 1225                 1230

Val Lys  Thr Phe Glu Asp Ile  Pro Leu Glu Glu Pro  Glu Val Lys
     1235                 1240                 1245

Val Ile  Pro Asp Asp Ser Gln  Thr Asp Ser Gly Met  Val Leu Ala
     1250                 1255                 1260

Ser Glu  Glu Leu Lys Thr Leu  Glu Asp Arg Asn Lys  Leu Ser Pro
     1265                 1270                 1275

Ser Phe  Gly Gly Met Met Pro  Ser Lys Ser Arg Glu  Ser Val Ala
     1280                 1285                 1290

Ser Glu  Gly Ser Asn Gln Thr  Ser Gly Tyr Gln Ser  Gly Tyr His
     1295                 1300                 1305

Ser Asp  Asp Thr Asp Thr Thr  Val Tyr Ser Ser Asp  Glu Ala Gly
     1310                 1315                 1320
```

```
Leu Leu  Lys Met Val Asp Ala  Ala Val His Ala Asp  Ser Gly Thr
    1325                 1330                 1335

Thr Leu  Ser Ser Pro Pro Val
    1340                 1345
```

<210> 9
<211> 180
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown: FLK-1 polypeptide

<400> 9

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Ile Leu Ile His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly
1               5                   10                  15

Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val Ile Val Glu Phe Ser
            20                  25                  30

Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly Lys Arg Asn Glu Phe
        35                  40                  45

Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg Gln Gly Lys Asp Tyr
    50                  55                  60

Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg Leu Asp Ser Ile Thr
65                  70                  75                  80

Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser Leu
                85                  90                  95

Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu Leu Tyr Lys Asp Phe
            100                 105                 110

Leu Thr Leu Glu His Leu Ile Cys Tyr Ser Phe Gln Val Ala Lys Gly
        115                 120                 125

Met Glu Phe Leu Ala Ser Arg Lys Cys Ile His Arg Asp Leu Ala Ala
    130                 135                 140

Arg Asn Ile Leu Leu Ser Glu Lys Asn Val Val Lys Ile Cys Asp Phe
145                 150                 155                 160
```

Gly Leu Ala Arg Asp Ile Tyr Lys Asp Pro Asp Tyr Val Arg Lys Gly
165 170 175

Asp Ala Arg Leu
180

<210> 10
<211> 180
<212> PRT
<213> Homo sapiens

<400> 10
Ile Leu Ile His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly
1 5 10 15

Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val Ile Val Glu Phe Cys
20 25 30

Lys Phe Asp Asn Leu Ser Thr Tyr Leu Arg Ser Lys Arg Asn Glu Phe
35 40 45

Val Pro Tyr Lys Thr Lys Gly Ala Arg Phe Arg Gln Gly Lys Asp Tyr
50 55 60

Val Gly Ala Ile Pro Val Asp Leu Lys Arg Arg Leu Asp Ser Ile Thr
65 70 75 80

Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser Leu
85 90 95

Ser Asp Val Glu Glu Glu Glu Ala Pro Glu Asp Leu Tyr Lys Asp Phe
100 105 110

Leu Thr Leu Glu His Leu Ile Cys Tyr Ser Phe Gln Val Ala Lys Gly
115 120 125

Met Glu Phe Leu Ala Ser Arg Lys Cys Ile His Arg Asp Leu Ala Ala
130 135 140

Arg Asn Ile Leu Leu Ser Glu Lys Asn Val Val Lys Ile Cys Asp Phe
145 150 155 160

Gly Leu Ala Arg Asp Ile Tyr Lys Asp Pro Asp Tyr Val Arg Lys Gly
165 170 175

Asp Ala Arg Leu
180

<210> 11
<211> 180
<212> PRT
<213> Rattus sp.

<400> 11
Ile Leu Ile His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly
1 5 10 15

Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val Ile Val Glu Phe Cys
20 25 30

Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Gly Lys Arg Asn Glu Phe
35 40 45

Val Pro Tyr Lys Ser Lys Gly Ala Arg Phe Arg Ser Gly Lys Asp Tyr
50 55 60

Val Gly Glu Leu Ser Val Asp Leu Lys Arg Arg Leu Asp Ser Ile Thr
65 70 75 80

Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys Ser Leu
85 90 95

Ser Asp Val Glu Glu Glu Glu Ala Ser Glu Glu Leu Tyr Lys Asp Phe
100 105 110

Leu Thr Leu Glu His Leu Ile Cys Tyr Ser Phe Gln Val Ala Lys Gly
115 120 125

Met Glu Phe Leu Ala Ser Arg Lys Cys Ile His Arg Asp Leu Ala Ala
130 135 140

Arg Asn Ile Leu Leu Ser Glu Lys Asn Val Val Lys Ile Cys Asp Phe
145 150 155 160

Gly Leu Ala Arg Asp Ile Tyr Lys Asp Pro Asp Tyr Val Arg Lys Gly
165 170 175

Asp Ala Arg Leu
180